

AMENDMENTS TO THE CLAIMS

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)

6. (Original) A polishing apparatus for polishing a work surface having protrusions and depressions thereon with slurry containing particles, comprising:

a laser optical system for projecting and irradiating laser light; and

a polishing tool system for performing press in an axis direction and rotational movement,

wherein said irradiation of laser light and polishing are performed on said depressions adjacent to said protrusions on said work surface simultaneously and sequentially by relative movement of said laser optical system and said polishing tool system to said work surface.

7. (Original) The polishing apparatus according to claim 6, wherein:

the shape of said surface of said region to be polished on said work surface is measured by shape measuring means before or during polishing; the measured shape is stored by storing means; a laser light irradiation region, an irradiation condition, and a polishing condition are calculated from the stored measurement data; and based on the calculation result, said laser optical system irradiates laser to said depressions adjacent to said protrusions or said polishing tool system polishes said protrusions and said depressions.

8. (Original) The polishing apparatus according to claim 6, wherein a light shield mask is placed in an optical path of said laser optical system in order to irradiate laser light selectively in accordance with the shape of said protrusions and said depressions of said work surface.